

I Claim:

1. A therapeutic tissue healing composition adapted for oral and non-oral application in mammals comprising:

an effective amount of a mixture of zinc oxide, fat-soluble vitamins A, D, E, K, an effective amount of an antibacterial agent, an effective amount of an antifungal agent, and an effective amount of calcium channel blocker.

2. The composition of Claim 1, wherein said calcium channel blocker is 3,5-pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(2-nitrophenyl)-dimethyl ester, $C_{17}H_{18}N_2O_6$.

3. The composition of Claim 1, wherein said Vitamin A is selected from the group consisting of retinol, 3,4-didehydroretinol, carotene, alpha-carotene, beta-carotene, delta-carotene, and gamma carotene.

4. The composition of Claim 1, wherein said Vitamin D is selected from the group consisting of cholecalciferol and ergocalciferol.

5. The composition of Claim 1, wherein said Vitamin E is selected from the group consisting of Vitamin E acetate, Vitamin E succinate, pharmaceutically acceptable Vitamin E salts and Vitamin E phosphate.

6. The composition of Claim 1, wherein said antibacterial agent is selected from the group consisting of bismuth-containing compounds, sulfonamides, nitrofurans, metronidazole, nimorazole, tinidazole, benzoic acid, aminoglycosides, macrolides, penicillins, polypeptides, tetracyclines, cephalosporins, chloramphenicol, clindamycin and mixtures thereof.

7. The composition of Claim 1, wherein said antibacterial agent is selected from the group consisting of bismuth aluminate, bismuth subcitrate, bismuth subgalate, bismuth subsalicylate, sulfonamides, nitrofurazone, nitrofurantoin, furazolidone, metronidazole, tinidazole, nimorazole,

benzoic acid, hentamycin, neomycin, kynamycin, streptomycin, erythromycin, clindamycin, rifampin, rifamycin, penicillin G, penicillin V, ampicillin, amoxicillin, bacitracin, polymixin, tetracycline, chlorotetracycline, oxytetracycline, doxycycline, cephalixin, cephalothin, clindamycin, chloramphenicol and mixtures thereof.

8. The composition of Claim 1, wherein said antibacterial agent is bacitracin zinc.
9. The composition of Claim 1, wherein said antifungal agent is selected from the group consisting of astemizole, clotrimazole, omeprazole, econazole, oxiconazole, sculconazole, fluconazole, ketoconazole, itraconazole, terbinafine, and mixtures thereof.
10. The composition of Claim 1, wherein said antifungal agent is clotrimazole.
11. The composition of Claim 1, wherein said Vitamin A is retinyl palmitate, said Vitamin D is ergocalciferol, and said Vitamin E is tocopherol.
12. A wound healing composition for repairing human skin tissue adapted for oral and non-oral administration, comprising:

a therapeutically effective mixture of zinc oxide, a calcium channel blocker, at least two fat-soluble vitamins admixed with a pharmaceutically acceptable carrier, an antibacterial agent and an antifungal agent, admixed in therapeutically effective amounts.
13. The composition of Claim 12, wherein said fat-soluble vitamins comprise at least Vitamins A and D.
14. The composition of Claim 13, further comprising therapeutically effective amounts of Vitamins E and K.
15. The composition of Claim 14, wherein said calcium channel blocker is nifedipine.
16. The composition of Claim 15, wherein the therapeutically effective mixture comprises between about 0.01% and about 75% by total weight of zinc oxide, between about 0.01% and

99.99% by total weight of combined amount of fat-soluble vitamins, and between 0.0001% and 50% by total weight of nifedipine.

17. A method of healing wounds in mammals by repairing body tissue in mammals, comprising the steps of:

contacting a wound to be healed with a therapeutic composition comprising an effective amount of a composition comprising at least two fat-soluble vitamins admixed with zinc oxide and a calcium channel blocker.

18. The method of Claim 17, wherein said calcium channel blocker is 3,5-pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(2-nitrophenyl)-dimethyl ester, $C_{17}H_{18}N_2O_6$.

19. The method of Claim 17, further comprising the step of admixing said at least two fat-soluble vitamins with effective amount of antibacterial and antifungal agents prior to contacting said wound.

20. The method of Claim 17, wherein said fat-soluble vitamins are selected from the group consisting of Vitamins A, D, E, and K.

21. The method of Claim 17, wherein said Vitamin A is elected from the group consisting of retinol, 3,4-didehydroretinol, carotene, alpha-carotene, beta-carotene, delta-carotene, and gamma carotene.

22. The method of Claim 17, wherein said Vitamin D is elected from the group consisting of cholecalciferol and ergocalciferol.

23. The method of Claim 17, wherein said Vitamin E is selected from the group consisting of Vitamin E acetate, Vitamin E succinate, pharmaceutically acceptable Vitamin E salts and Vitamin E phosphate.

24. The method of Claim 19, wherein said antibacterial agents are selected from the group consisting of bismuth-containing compounds, sulfonamides, nitrofurans, metronidazole, nimorazole, tinidazole, benzoic acid, aminoglycosides, macrolides, penicillins, polypeptides, tetracyclines, cephalosporins, chloramphenicol, clindamycin and mixtures thereof.

25. The method of Claim 19, wherein said antibacterial agents are selected from the group consisting of bismuth aluminate, bismuth subcitrate, bismuth subgalate, bismuth subsalicylate, sulfonamides, nitrofurazone, nitrofurantoin, furazolidone, metronidazole, tinidazole, nimorazole, benzoic acid, hentamycin, neomycin, kynamycin, streptomycin, erythromycin, clindamycin, rifampin, rifamycin, penicillin G, penicillin V, ampicillin, amoxicillin, bacitracin, polymyxin, tetracycline, chlortetracycline, oxytetracycline, doxycycline, cephalixin, cephalothin, clindamycin, chloramphenicol and mixtures thereof.

26. The method of Claim 19, wherein said antibacterial agent is bacitracin zinc.

27. The method of Claim 19, wherein said antifungal agents are selected from the group consisting of astemizole, clotrimazole, omeprazole, econazole, oxiconazole, sculconazole, fluconazole, ketoconazole, itraconazole, terbinafine, and mixtures thereof.

28. The method of Claim 17, comprising the step of topically contacting a mammalian skin wound to be treated with a therapeutic composition consisting essentially of:

2 to 25 wt% zinc oxide;

0.0001 to 50 wt% nifedipine;

vitamin A, vitamin D, vitamin E, and Vitamin K, wherein the four vitamins are present in a combined amount of 1 to 35 wt%; and

an effective amount of an antibacterial and antifungal agents.